

ABSTRACT OF THE DISCLOSURE

The invention provides technologies which can restrict damage due to static electricity to a gate insulating film of a transistor inside a semiconductor device forming an oscillating circuit. In particular, an oscillating circuit can include an oscillator and a semiconductor device which utilizes the oscillator. The semiconductor device can include an inverting amplifier which is provided in parallel with the oscillator and comprises an insulated gate type field effect transistor; a buffer circuit which includes an insulated gate type field effect transistor and is used to send out a signal output from the inverting amplifier to another circuit, and a transmission gate which is provided between the output terminal of the inverting amplifier and the input terminal of the buffer circuit, and includes an insulated gate type field effect transistor.